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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,918	07/11/2001	Pierre-Andre Laurent	211319US2PCT	4665
22850	7590	11/02/2004		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BAYARD, EMMANUEL	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/868,918		LAURENT, PIERRE-ANDRE	
	Examiner		Art Unit	
	Emmanuel Bayard		2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/11/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 3 and 4 are objected to because of the following informalities: The word "it" in line 2 of claims above is undefined. Applicant is suggested to replace the word "it" by the proper meaning or definition. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 1 recites the limitation "the grid" and "the anode" in lines 3 and 4, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehri et al U.S. patent No 5,438,686 in view of Marchand U.S. patent No 5,074,499.

As per claim 1, Gehri teaches Digital signals radio broadcasting transmitter comprising a power tube in which the grid is excited by a variable phase signal through an excitation device and in which the anode is amplitude modulated by the output signal from a modulator, the phase and amplitude of signals applied on the grid and anode of the tube respectively being represented by the phase and amplitude of a complex signal to be transmitted (see abstract and fig.1 and col.1, lines 58-65 and col.2, lines 30-35 and col.4, lines 5-17).

However Gehri does not teach wherein the excitation device has a linear amplification characteristic for low amplitudes of the signal to be transmitted and operates under saturated conditions when the amplitude of the signal to be transmitted exceeds a determined threshold value, so that the amplification characteristic of the transmitter as a whole remains linear independently of the amplitude of the signal to be transmitted.

Marchand teaches switching device is functionally equivalent to the claimed (excitation device) has a linear amplification characteristic for low amplitudes of the signal to be transmitted and operates under saturated conditions when the amplitude of the signal to be transmitted exceeds a determined threshold value, so that the amplification characteristic of the transmitter as a whole remains linear independently of the amplitude of the signal to be transmitted (see col.6, lines 60-67).

It would have been obvious to one of ordinary skill in the art to implement the teaching of Marchand into Gehri as to protect the system from accidental imitation of an initialization message by any other regularly induced signal ad taught by Marchand (see col.5, lines 20-24).

As per as per claim 2, Gehri in combination with Marchand would include a control device to apply a low and approximately constant polarization voltage to the anode of the tube for low amplitude signals to be transmitted with a value below a given threshold value, and to modulate the anode voltage proportionally to the modulus of the signal to be transmitted at signal amplitudes to be transmitted higher than the determined threshold value as to protect the system from accidental imitation of an initialization message by any other regularly induced signal ad taught by Marchand (see col.5, lines 20-24).

As per as per claim 3, Gehri in combination with Marchand would include wherein the tube operates in linear amplification mode for which it is conducting when the amplitude of the signal to be transmitted is below the given threshold value and operates as a switch when the amplitude of the signal to be transmitted is higher than the given threshold value as to protect the system from accidental imitation of an initialization message by any other regularly induced signal ad taught by Marchand (see col.5, lines 20-24).

As per as per claim 4, Gehri in combination with Marchand would include wherein the tube operates in linear amplification mode for which it is conducting when the amplitude of the signal to be transmitted is below the given threshold value and operates as a switch when the amplitude of the signal to be

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transmitted is higher than the given threshold value as to protect the system from accidental imitation of an initialization message by any other regularly induced signal as taught by Marchand (see col.5, lines 20-24).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gautschi U.S. patent No 4,656,440 teaches a single sideband modulator.

Tomljenovic U.S. patent No 4,955,072 teaches a method of generating an amplitude modulated ISB transmission signal.

Swansson et al U.S. patent No 5,903,188 teaches a modulator having improved discharging unwanted capacitance.

Bertiger et al U.S. Patent No 5,285,208 teaches a power management system.

Reeves U.S. Patent No 3,801,732 teaches a method and apparatus for scrambled television.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571 272 3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Bayard
Primary Examiner
Art Unit 2631

10/29/04


EMMANUEL BAYARD
PRIMARY EXAMINER